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Trawling Through Time
Old Data, New Insights

Centre for Environment Fisheries & Aquaculture Science

ICES CIEM

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Long-term data are key for studying impact of past and future climate change on fish and fisheries.

For climate variables, several long time-series exist spanning many decades to centuries; but...

...for fish, long-term data are much sparser, and tend to be available for the past two to four decades only.

Cefas first home in Lowestoft

Cefas has carried out numerous ship-based surveys in the North Sea ever since 1902, when the lab was established in Lowestoft.

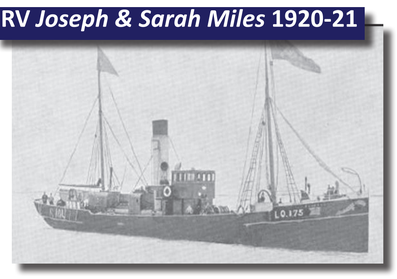
We report on recent advances to digitise historical fisheries data recovered fom Cefas archives.

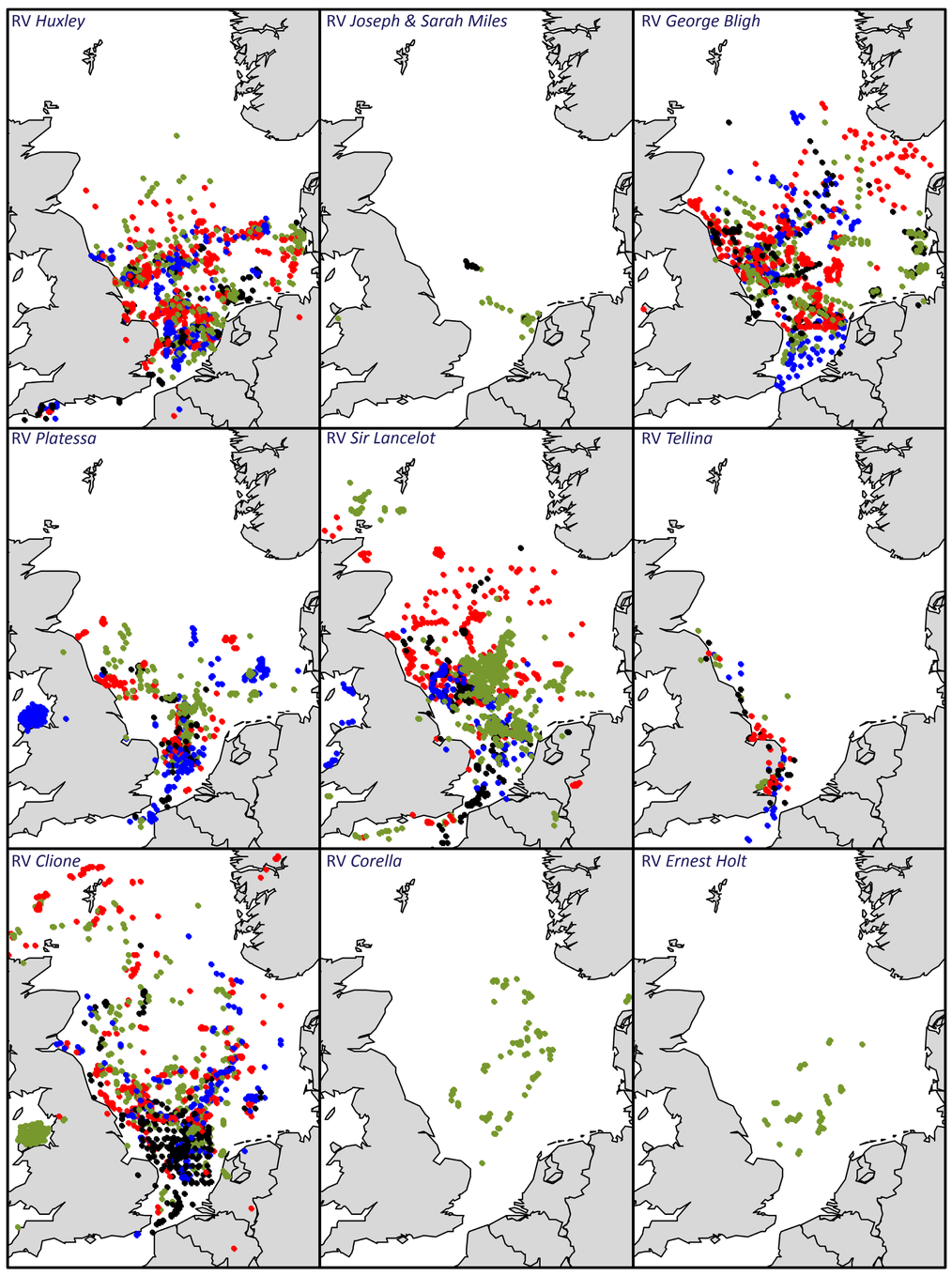
Our legacy survey dataset, *Trawling Through Time*, covers the years 1902 to 1971. Cefas surveys continue into the present.

Cefas' Research Vessels, 1902-71

Nine RVs surveyed thousands of data points in the North Sea. They include steam trawlers, an ex-WWI hospital ship, small coastal RVs and a distant-water trawler. They reflect Britain's trawling fleet history, from sail-aided steam power to diesel propulsion.

RV *Joseph & Sarah Miles* 1920-21





RV *Huxley* 1902-09

Michael Graham dissecting a cod; Cefas director from 1945-58. A strong advocate for ship-based surveys

RV *George Bligh* 1921-39

RV *Sir Lancelot* 1947-60

RV *Clione* 1961-71

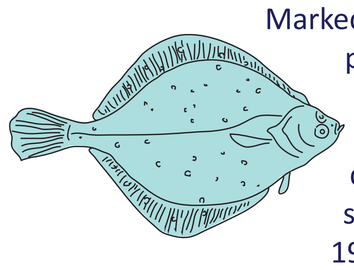
RV *Ernest Holt* 1970

RV *Tellina* 1960-71

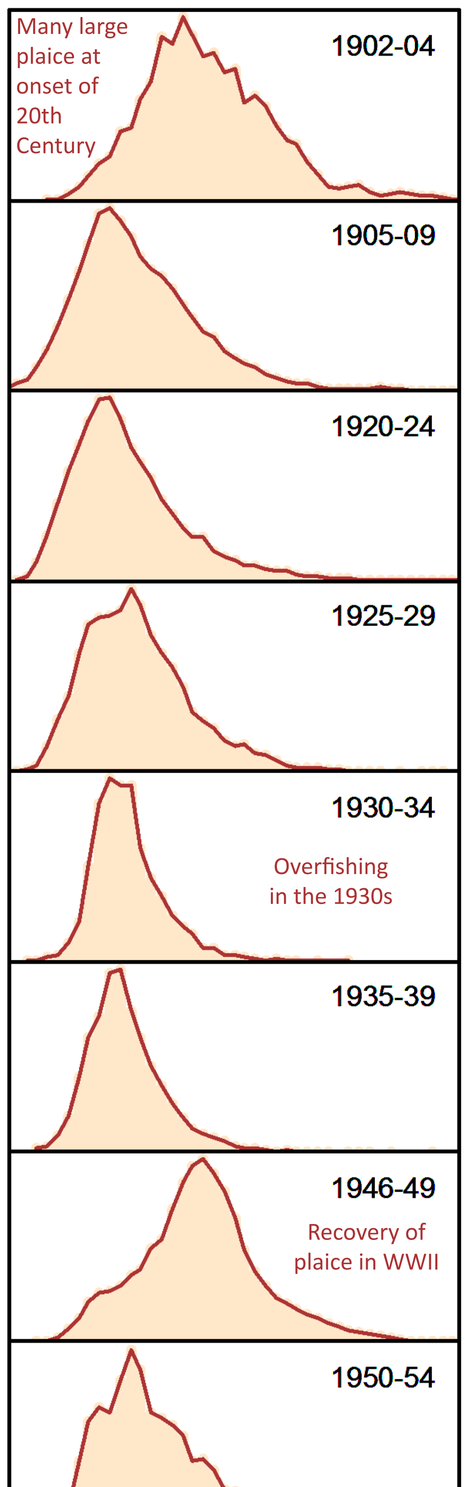
RV *Platessa* 1946-65

RV *Corella* 1968-69

Cefas' Most Studied Fish - Plaice

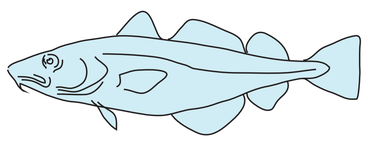


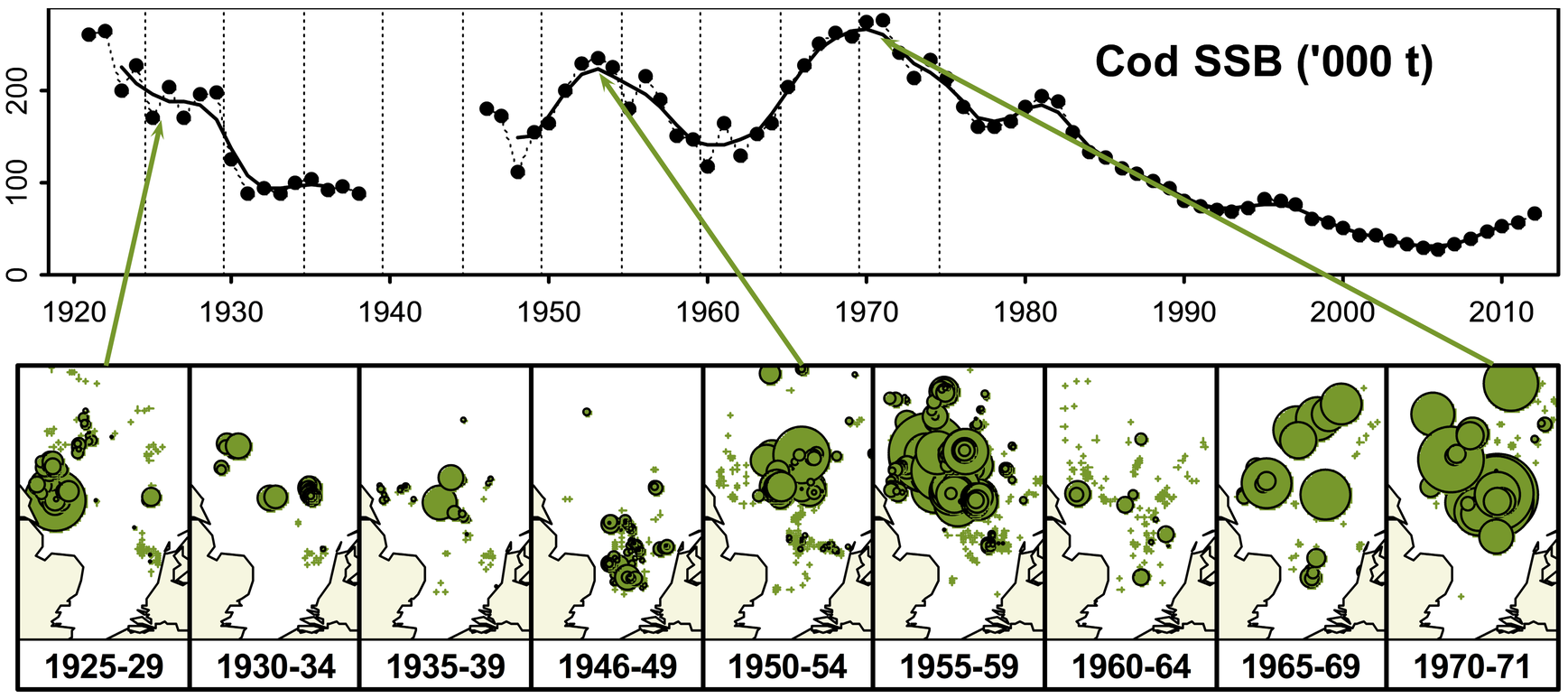
Marked changes in plaice length distribution as sampled during Cefas surveys from 1902 to 1971.



Cefas' Enigmatic Fish - Cod

A reconstruction of cod spawning stock biomass (SSB) based on Pope & Macer (1996) and ICES (2012) compared against cod catch-per-unit-effort distribution in nine pentades, from the 1920s to 1970s.





References: ICES (2012) Report of WGNSSK. ICES CM 2012/ACOM:13. Pope J.G. & Macer C.T. (1996) *ICES J. Mar. Sci.* 53: 1157-1169.

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